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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,288	01/26/2004	Rade Petrovic	2073-136	6479
20028	7590	09/13/2006	EXAMINER CALLAHAN, PAUL E	
Lipsitz & McAllister, LLC 755 MAIN STREET MONROE, CT 06468			ART UNIT 2137	PAPER NUMBER

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/763,288	<b>Applicant(s)</b> PETROVIC, RADE	
	<b>Examiner</b> Paul Callahan	<b>Art Unit</b> 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6, 8-11 and 27-38 is/are allowed.
- 6) ☐ Claim(s) 12-20, 22, 26 is/are rejected.
- 7) ☒ Claim(s) 21 and 23-25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                                  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____   |

**DETAILED ACTION**

1. Claims 1-38 were pending at the time of the previous Office Action in the case. Claim 7 has been cancelled via the amendment filed 8-12-05. Therefore claims 1-6, and 8-38 remain pending and have been examined.

***Response to Arguments***

2. Applicant's request for reconsideration of the finality of the rejection of the last Office action, presented in the interview conducted Dec. 20, 2005, are persuasive and, therefore, the finality of that action is withdrawn.

**PROSECUTION IS HEREBY REOPENED.**

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

  
**EMMANUEL L. MOISE**  
**SUPERVISORY PATENT EXAMINER**

3. Applicant's arguments, filed 8-12-05, with respect to the rejections of claims 1-6 and 20-26 have been fully considered and are persuasive. The rejections of claims 1-6 and 20-26 under 35 USC 102(e) as anticipated by Leighton US 5,949,885, have been withdrawn. However the arguments are moot with respect to claims 20, 22, and 26 in view of the new ground(s) of rejection presented infra.

4. The indicated allowability of claims 12-19 is withdrawn in view of a reconsideration of the claim language in light of US Patents 6,683,958 and 5,764,763. Rejections based on the newly cited reference(s) follow.

### ***Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 12-19 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,683,958, in view of Jensen et al., US Patent 5,764,763.

As for claim 12, claim 1 of US 6,683,958 teaches all of the limitations of the claim of the instant application except for the final limitation which recites: "wherein said information symbols identify said host signal". However Jensen teaches this feature in col. 34 lines 10-15 where an identification number is watermarked into the host signal. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have incorporated this feature of Jensen into the method of claim 12. Motive to make this combination is discussed in Jensen at col. 34 lines 10-15 where the desirability of preventing unauthorized copying of the watermarked work is discussed. This type of copy control is discussed as a desirable feature of US Patent 6,683,958 at col. 1 lines 40-45.

As for claim 13, claim 1 of US 6,683,958 teaches all of the limitations of the claim of the instant application except for the final limitation which recites: "wherein said information symbols comprise copyright information associated with said host signal". However Jensen teaches this feature in col. 34 lines 53-56 where copyright information is watermarked into the host signal. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have incorporated this feature of Jensen into the method of claim 13. Motive to make this combination is discussed in Jensen at col. 34 lines 10-15 where the desirability of preventing unauthorized copying of the watermarked work is discussed. This type of copy control is discussed as a desirable feature of US Patent 6,683,958 at col. 1 lines 53-56.

As for claims 14 and 15, claim 1 of US 6,683,958 teaches all of the limitations of the claims of the instant application except for the final limitation which recites: "wherein said information symbols identify an attribute of said host signal" and "where said attribute comprises copy management rules associated with said host signal". However Jensen teaches these features in col. 34 lines 45-50 where copy-inhibit information is watermarked into the host signal indicating an attribute of the host signal that it cannot be copied. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have incorporated this feature of Jensen into the method of claims 14 and 15. Motive to make this combination is discussed in Jensen at col. 34 lines 10-15 where the desirability of preventing unauthorized copying of the watermarked work is discussed. This type of copy control is discussed as a desirable feature of US Patent 6,683,958 at col. 1 lines 53-56

Claims 16 and 17 recite limitations directed to an attribute that comprises usage rules and distribution control rules respectively. The Examiner considers copy control rules to be synonymous with usage and distribution control rules. Therefore claims 16 and 17 recite substantially the same limitation as claims 14 and 15 and are rejected on the same basis.

As for claim 18, claim 1 of US 6,683,958 teaches all of the limitations of the claim of the instant application except for the final limitation which recites: "wherein said host signal is stored on a physical medium subsequent to said modifying". However Jensen

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teaches this feature in col. 34 lines 57-61, where watermarked signals are recorded on a physical medium such as a tape or disk. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have incorporated this feature of Jensen into the method of claim 18. It would be desirable to make this combination since this would allow for greater copy control over works distributed on a physical medium such as a CD.

As for claim 19, claim 1 of US 6,683,958 teaches all of the limitations of the claim of the instant application except for the final limitation which recites: "wherein said host signal is distributed by one of radio wave transmission and wired transmission subsequent to said modifying". However Jensen teaches this feature in col. 34 lines 45-55, where watermarked signals are broadcast via radio (EM) wave. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have incorporated this feature of Jensen into the method of claim 19. It would be desirable to make this combination since this would allow for greater copy control over works made available over the air.

### ***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 20, 22, and 26 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Jensen et al., 5,450,490.

As for claim 20, Jensen teaches a method for encoding information symbols onto a host signal (abstract) comprising: providing an information carrier signal comprising one or more features of said host signal (col.3 lines 30-50, The audio carrier signal has a plurality of audio signal frequency components, at least one of these plurality is chosen as the frequency component used to mask the encoded information signal), determining the value of an auxiliary information signal representing an information symbol (col. 3 lines 30-50, a code is chosen having at least one code frequency component), calculating at least one or more values for modifying said information carrier signal in accordance with said auxiliary information signal (col. 3 lines 30-50: an amplitude is assigned to the code signal to be embedded based on an evaluation of the ability of carrier signal to mask it, the carrier signal is modified on this basis when the code is embedded), developing a host modifying signal for modifying said host signal based upon said calculated values (col. 3 lines 30-50: an amplitude is assigned to the code signal to be embedded based on an evaluation of the ability of the carrier signal to mask it, the carrier signal is modified on this basis when the code is embedded), modifying said host signal with said host modifying signal (col. 3 lines 30-50, the code frequency component is taught as being included in the host audio signal).



As for claim 22, Jensen teaches that the features are determined in a frequency domain (col. 3 lines 30-50).

As for claim 26, Jensen teaches a modifying step that is carried out in an analog domain (col. 3 lines 30-50, an analog audio signal is being watermarked in a frequency domain).

***Allowable Subject Matter***

9. Claims 1-6, 8-11, and 27-38 are allowed.
10. Claims 21, and 23-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
11. The following is a statement of reasons for the indication of allowable subject matter: The closest prior art in the field, Jensen 5,450,490, fails to teach the combination of features of the claimed invention as set forth in the independent claims, or in the dependent claims objected to supra, particularly including:

As per claim 1, the determination of the correlation value and detection of auxiliary information symbols from the correlation value,

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As per claim 8, an auxiliary information carrier that comprises multiple distinct frequency bands,

As for claim 10, the calculated value of the applicant wherein it is a fixed gain value of the auxiliary information carrier,

As for claim 21, features that comprise a masked version of said host signal,

As for claim 23, a host modifying signal that comprises a plurality of signal components having varying amounts of delay or offset from one another. Claim 24 is dependent on claim 23 and therefore contains allowable subject matter on that basis should claim 23 be rewritten in independent form containing all the limitations of claim 20 from which it depends,

As for claim 25, a host modifying signal that is obtained by modulating at least one of the amplitude or phase of the host signal,

As for claim 27, generating a host-modifying signal by applying a fixed gain to said information carrier signal in accordance with the auxiliary information symbol.

Claims 28-38 are dependent on claim 27 and are allowable on that basis.

**Conclusion**

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul E. Callahan whose telephone number is (571) 272-3869. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Emmanuel Moise, can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is: (571) 273-8300.

9-1-06

PEC

A handwritten signature in black ink, appearing to read "Paul E. Callahan", with a long horizontal flourish extending to the right.